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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/755,512	01/05/2001	Raymond Kloth	112025-0074C1	6783
24267 7590 04/03/2008 CESARI AND MCKENNA, LLP 88 BLACK FALCON AVENUE BOSTON, MA 02210				
EXAMINER NGUYEN, TOAN D				
ART UNIT		PAPER NUMBER		
2616				
MAIL DATE		DELIVERY MODE		
04/03/2008		PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

09/755,512

Applicant(s)

KLOTH, RAYMOND

Examiner

TOAN D. NGUYEN

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 January 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1, 4, 8-11, 13-16, 18-20 and 24-42 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1, 4, 8-11, 18-20 and 24-42 is/are allowed.
- 6) ☒ Claim(s) 13-16 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 11 April 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notices of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

1. In view of the Appeal Brief filed on 01/14/08, PROSECUTION IS HEREBY REOPENED. A non-final office action is set forth below.

To avoid abandonment of the application, appellant must exercise one of the following two options:

(1) file a reply under 37 CFR 1.111 (if this Office action is non-final) or a reply under 37 CFR 1.113 (if this Office action is final); or,

(2) initiate a new appeal by filing a notice of appeal under 37 CFR 41.31 followed by an appeal brief under 37 CFR 41.37. The previously paid notice of appeal fee and appeal brief fee can be applied to the new appeal. If, however, the appeal fees set forth in 37 CFR 41.20 have been increased since they were previously paid, then appellant must pay the difference between the increased fees and the amount previously paid.

A Supervisory Patent Examiner (SPE) has approved of reopening prosecution by signing below:

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 13 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable Shani (US 6,023,563).

For claim 13, Shani discloses networking switch having the network presence of a bridge, comprising:

using one or more indicia of frame type (figure 4, reference 20, col. 10, lines 51-56) found in a received frame (figure 4, reference 10, col. 9, lines 58-60) to derive a virtual local area network (derived VLAN) value (figure 4, reference 22, col. 10, lines 51-58); and

using the derived VLAN value in making forwarding decisions (figure 4, reference 28, col. 10, line 63 to col. 11, line 1).

However, Shani does not expressly disclose said derived VLAN value used internal to said switch, said derived VLAN value different from a VLAN value associated the frame external to the switch. To include said derived VLAN value used internal to said switch, said derived VLAN value different from a VLAN value associated the frame external to the switch would have been obvious to one of ordinary skill in the art because Shani teaches at col. 10, lines 51-56: "The NS extract the frame's MSA, NDA, NSA, protocol type, and VLAN number (a VLAN value associated the frame external to the switch) if this feature is enabled. With that data the NS searches the Main database, using the NDA as a key, for the destination's MAC address and port number. Also if the VLAN option is enabled it searches for the destination's VLAN number (derived VLAN value means)." Therefore, the derived VLAN value different from VLAN value associated the frame external to the switch).

For claim 16, Shani discloses networking switch having the network presence of

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a bridge, comprising:

using one or more indicia of frame type (figure 4, reference 20, col. 10, lines 51-56) found in the received frame (figure 4, reference 10, col. 9, lines 58-60) to derive a virtual local area network (derived VLAN) value (figure 4, reference 22, col. 10, lines 51-58); and

using the derived VLAN value in making forwarding decisions (figure 4, reference 28, col. 10, line 63 to col. 11, line 1).

However, Shani does not expressly disclose said derived VLAN value used internal to said switch, said derived VLAN value different from a VLAN value associated the frame external to the switch. To include said derived VLAN value used internal to said switch, said derived VLAN value different from a VLAN value associated the frame external to the switch would have been obvious to one of ordinary skill in the art because Shani teaches at col. 10, lines 51-56: "The NS extract the frame's MSA, NDA, NSA, protocol type, and VLAN number (a VLAN value associated the frame external to the switch) if this feature is enabled. With that data the NS searches the Main database, using the NDA as a key, for the destination's MAC address and port number. Also if the VLAN option is enabled it searches for the destination's VLAN number (derived VLAN value means)." Therefore, the derived VLAN value different from VLAN value associated the frame external to the switch).

Allowable Subject Matter

4. Claims 1-4, 8-11, 18-20 and 24-42 are allowed.

Regarding claims 1 and 11, the prior art fails to teach a combination of the steps of:

deriving a virtual local area network (derived VLAN) value in response to said one or more of indicia of frame type and said VLAN value, said derived VLAN value for use internal to said switch, in the specific combination as recited in the claims.

Regarding claim 9, the prior art fails to teach a combination of the steps of:

a parsing engine to derive a virtual local area network (derived VLAN) value in response to said one or more of indicia of frame type and said VLAN value, said derived VLAN value for use internal to said switch, in the specific combination as recited in the claim.

Regarding claim 18, the prior art fails to teach a combination of the steps of:

deriving a virtual local area network (derived VLAN) value in response to said one or more of indicia of frame type and said port index value, in the specific combination as recited in the claim.

Regarding claims 19, the prior art fails to teach a combination of the steps of:

a parsing engine to derive a virtual local area network (derived VLAN) value in response to said one or more of indicia of frame type and said index value, in the specific combination as recited in the claim.

Regarding claims 20, the prior art fails to teach a combination of the steps of:

means for deriving a virtual local area network (derived VLAN) value in response to said one or more of indicia of frame type and said index value, in the specific combination as recited in the claim.

Regarding claim 32, the prior art fails to teach a combination of the steps of:

applying the mapping address to a memory structure to obtain a derived VLAN value that is based upon both the frame's protocol type and the VLAN value associated with the input port, the derived VLAN value to differ from at least one other derived VLAN value for another frame received on the input port, but having a different protocol type, in the specific combination as recited in the claim.

Regarding claim 36, the prior art fails to teach a combination of the steps of:

an engine to concatenate the protocol code together with the VLAN value to produce a mapping address, and to apply the mapping address to a memory structure to obtain a derived VLAN value that is based upon both the frame's protocol type and the VLAN value associated with the input port, the derived VLAN value to differ from at least one other derived VLAN value for another frame received on the input port, but having a different protocol type, in the specific combination as recited in the claim.

Regarding claim 39, the prior art fails to teach a combination of the steps of:

applying the subnet value to a memory structure to map the subnet value to a derived VLAN value, the derived VLAN value to differ from at least one other derived VLAN value for another frame received on the input port, but having a different subnet value, in the specific combination as recited in the claim.

Regarding claim 41, the prior art fails to teach a combination of the steps of:

an engine to, in response to the protocol type indicating a particular protocol type, parse the source address to obtain a subnet value, and to apply the subnet value to a memory structure to map the subnet value to a derived VLAN value, the derived

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VLAN value to differ from at least one other derived VLAN value for another frame received on the input port, but having a different subnet value, in the specific combination as recited in the claim.

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to TOAN D. NGUYEN whose telephone number is (571)272-3153. The examiner can normally be reached on M-F (7:00AM-4:30PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Huy Vu can be reached on 571-272-3155. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/T. D. N./
Examiner, Art Unit 2616

/Huy D. Vu/
Supervisory Patent Examiner, Art Unit 2616